

Listing of Claims:

A detailed listing of all claims in the application is presented below. This listing of claims will replace all prior versions, and listings, of claims in the application. All claims being currently amended are submitted with markings to indicate the changes that have been made relative to immediate prior version of the claims. Claims 1-50 are canceled. Claims 51-94 (original) remain in this case. The changes in any amended claims are being shown by strikethrough (for deleted matter) or underlined (for added matter).

Claims 1 - 50 (Canceled)

Claim 51. (Original) A method for manufacturing an electroluminescent lamp and membrane switch assembly, said method comprising the following steps of:

forming rear capacitive plate electrodes from a metal foil by embossing said metal foil onto a first surface of an insulating flexible plastic film;

forming front capacitive electrodes from a metal foil by embossing said metal foil onto said first surface of said insulating flexible plastic film;

forming electrical distribution pathways connected to said capacitive electrodes from a metal foil by embossing said metal foil onto said first surface of said insulating flexible plastic film;

forming electrical terminations that connect to said electrical distribution pathways from a metal foil by embossing said metal foil onto said first surface of said insulating flexible plastic film;

forming a pair of switch contact electrodes from a metal foil by embossing metal foil onto the second surface of said insulating flexible plastic film;

forming electrical distribution pathways connected to said pair of switch contact electrodes from a metal foil by embossing said metal foil onto said second surface of said insulating flexible plastic film;

forming electrical terminations that connect to said electrical distribution pathways from a metal foil by embossing said metal foil onto said second surface of said insulating flexible plastic film;

forming a switch contact shunt electrode from a metal foil by embossing said metal foil onto said second surface of said insulating flexible plastic film;

applying said insulating flexible plastic film to an optically registered indexing system, said optically registered indexing system to precisely position said insulating plastic film for further electroluminescent lighted membrane switch construction processing;

applying a layer of capacitive dielectric to said metal foil rear capacitive plate electrodes, said capacitive dielectric for electrically isolating said rear capacitive plate electrodes;

applying a layer of electroluminescent phosphor to said capacitive dielectric layer, said electroluminescent phosphor layer for precisely defining an area of illumination;

applying an electrically conductive layer to said electroluminescent phosphor layer, said electrically conductive layer contacting said front capacitive electrodes thereby creating a light transmissive second capacitive plate;

applying an insulating layer to cover said second capacitive plate, said insulating layer extending to cover said electrical distribution pathways;

die cutting said insulating flexible plastic film in a pattern comprising a three part, two hinged foldable electroluminescent illuminated membrane switch subassembly having a tab portion extending therefrom, said tab portion supporting said electrical terminations connecting to said electrical distribution pathways, thus creating an electroluminescent illuminated membrane switch subassembly;

embossing said insulating flexible plastic film in a pattern comprising a serpentine spring member substantially forming a surrounding frame element that is offset from the perimeter of said switch contact shunt electrode and permanently deforming said switch contact shunt and said insulating flexible plastic film to form a switch actuator surface bordered by said frame element;

folding a first portion from said electroluminescent illuminated membrane switch subassembly, said first portion folded at the location of one of two said hinges and substantially positioning said switch contact shunt electrode opposite said switch contact electrodes; and

folding a second portion from said electroluminescent illuminate membrane switch subassembly, said second portion folded at the location of the remaining said hinge, thus overlapping said second portion above said first portion and substantially positioning said rear capacitive plate electrode opposite said switch contact shunt electrode.

Claim 52. (Original) The method of claim 51 wherein said metal foil is die cut to form said rear capacitive plate electrodes.

Claim 53. (Original) The method of claim 51 wherein said metal foil is chemically etched to form said rear capacitive plate electrodes.

Claim 54. (Original) The method of claim 51 wherein said metal foil is laser cut to form said rear capacitive plate electrodes.

Claim 55. (Original) The method of claim 51 wherein said rear capacitive plate electrodes is a layer of electrically conductive ink.

Claim 56. (Original) The method of claim 51 wherein said rear capacitive plate electrodes is a layer of deposited metal.

Claim 57. (Original) The method of claim 51 wherein said metal foil is die cut to form said front capacitive electrodes.

Claim 58. (Original) The method of claim 51 wherein said metal foil is chemically etched to form said front capacitive electrodes.

Claim 59. (Original) The method of claim 51 wherein said metal foil is laser cut to form said front capacitive electrodes.

Claim 60. (Original) The method of claim 51 wherein said front capacitive electrodes is a layer of electrically conductive ink.

Claim 61. (Original) The method of claim 51 wherein said front capacitive electrodes is a layer of deposited metal.

Claim 62. (Original) The method of claim 51 wherein said metal foil is die cut to form said electrical distribution pathways.

Claim 63. (Original) The method of claim 51 wherein said metal foil is chemically etched to form said electrical distribution pathways.

Claim 64. (Original) The method of claim 51 wherein said metal foil is laser cut to form said electrical distribution pathways.

Claim 65. (Original) The method of claim 51 wherein said electrical distribution pathways is a layer of electrically conductive ink.

Claim 66. (Original) The method of claim 51 wherein said electrical distribution pathways is a layer of deposited metal.

Claim 67. (Original) The method of claim 51 wherein said metal foil is die cut to form said electrical terminations.

Claim 68. (Original) The method of claim 51 wherein said metal foil is chemically etched to form said electrical terminations.

Claim 69. (Original) The method of claim 51 wherein said metal foil is laser cut to form said electrical terminations.

Claim 70. (Original) The method of claim 51 wherein said electrical terminations is a layer of electrically conductive ink.

Claim 71. (Original) The method of claim 51 wherein said electrical terminations is a layer of deposited metal.

Claim 72. (Original) The method of claim 51 wherein said metal foil is die cut to form said pair of switch contact electrodes.

Claim 73. (Original) The method of claim 51 wherein said metal foil is chemically etched to form said pair of switch contact electrodes.

Claim 74. (Original) The method of claim 51 wherein said pair of switch contact electrodes is a layer of electrically conductive ink.

Claim 75. (Original) The method of claim 51 wherein said metal foil is laser cut to form said pair of switch contact electrodes.

Claim 76. (Original) The method of claim 51 wherein said metal foil is die cut to form said switch contact shunt electrode.

Claim 77. (Original) The method of claim 51 wherein said metal foil is chemically etched to form said switch contact shunt electrode.

Claim 78. (Original) The method of claim 51 wherein said switch contact shunt electrode is a layer of electrically conductive ink.

Claim 79. (Original) The method of claim 51 wherein said metal foil is laser cut to form said switch contact shunt electrode.

Claim 80. (Original) The method of claim 51 wherein said switch contact shunt electrode is embossed to form a substantially convex snap dome contact.

Claim 81. (Original) The method of claim 51 wherein said switch contact shunt located on said second surface of said insulating flexible plastic film is substantially positioned opposite of said rear capacitive plate located on said first surface of said insulating flexible plastic film.

Claim 82. (Original) The method of claim 51 wherein said first folded portion of said insulating flexible plastic film is embossed to form a serpentine spring member surrounding a die cut aperture opening substantially shaped and sized to allow passage of said switch shunt electrode therethrough, and said aperture opening substantially oppositely positioned above said switch contacts.

Claim 83. (Original) The method of claim 51 wherein said light transmissive front capacitive plate is a layer of conductive ink.

Claim 84. (Original) The method of claim 51 wherein said light transmissive front capacitive plate is a conductive metal oxide coated plastic film.

Claim 85. (Original) The method of claim 51 wherein said light transmissive front capacitive plate is a conductive ink containing metal oxide.

Claim 86. (Original) The method of claim 51 wherein said light transmissive front capacitive plate is a sputter coated layer containing metal oxide.

Claim 87. (Original) The method of claim 51 wherein said light transmissive front capacitive plate is a plasma spray coated metal oxide.

Claim 88. (Original) The method of claim 51 wherein said light transmissive front capacitive plate is a conductive organic polymer comprised of PEDOT (Poly-3,4-Ethylenedioxythiophene).

Claim 89. (Original) The method of claim 51 wherein said electroluminescent phosphor layer is an electroluminescent phosphor particle imbued plastic film.

Claim 90. (Original) The method of claim 51 wherein said electroluminescent phosphor layer is an electroluminescent phosphor particle imbued ink.

Claim 91. (Original) The method of claim 51 wherein said electroluminescent phosphor layer is applied via plasma spray.

Claim 92. (Original) The method of claim 51 wherein said capacitive dielectric layer is a plastic film.

Claim 93. (Original) The method of claim 51 wherein said capacitive dielectric layer is ink.

Claim 94. (Original) The method of claim 51 wherein said capacitive dielectric layer is applied via plasma spray.